

CLAIMS

1. Telecommunications services apparatus for use with a telephone network, the apparatus comprising:
  - 5 means operable to support execution of one or more messaging applications, wherein an application may be executed for each of any or all messages that arrive at the apparatus;  
means for storing message attributes matched to respective messaging applications;
  - 10 means for comparing, for each message, an attribute of that message with the stored message attributes, and operable thereby to select the respective messaging application on the basis of the comparison; and  
means for executing the selected messaging application, execution of the selected application including processing, transforming and/or routing the respective  
15 message.
2. Apparatus according to claim 1, wherein the message attributes include destination address.
- 20 3. Apparatus according to claim 1 or claim 2, wherein the message attributes include destination address type.
4. Apparatus according to claim 1, claim 2 or claim 3, wherein the message attributes include originating address.  
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5. Apparatus according to any one of claims 1 to 4, wherein the message attributes include originating address type.
6. Apparatus according to any one of claims 1 to 5, wherein the message  
30 attributes include signalling fields.

7. Apparatus according to any one of claims 1 to 6, wherein the message attributes include message content.
8. Apparatus according to any one of claims 1 to 7, comprising at least one SMS router for routing messages to the means operable to support execution of one or more messaging applications.
9. Apparatus according to claim 8, including an SMS service control point (SCP) such that service logic may operate in the SMS router in conjunction with centralised intelligence in the SMS SCP.
10. Apparatus according to any one of claims 1 to 9, comprising a message transformation means for parsing, interpreting and transforming message content and addressing in order to generate a response message.
11. Apparatus according to claim 10, wherein the response message is generated according to a programmable table of exceptions.
12. Apparatus according to claim 10 or claim 11, as dependent on claim 8, wherein the response message is routed via the SMS router.
13. Apparatus according to claim 10, claim 11 or claim 12, wherein the message from the sender is in mobile originated form, whereas the response message is in mobile terminated form.
14. Apparatus according to claim 10 or claim 11, wherein the response message is routed over a data network.
15. Apparatus according to any one of claims 10 to 14, wherein the message transformation means is operable to return a response message back to the original sender without requiring a routing query to a home location register (HLR), the response addressing and routing information being derived from the original message.

16. Telecommunications services apparatus for use with a telephone network, the apparatus comprising:

5 a message transformation means operable to parse, interpret and transform message content and addressing in order to generate a response message according to programmable tables of rules known as exceptions, wherein the exceptions conform to a syntax that permits matching of a single exception to multiple forms of message construction.

10 17. Telecommunications services apparatus for use with a telephone network, the apparatus comprising:

15 a message transformation means operable to parse, interpret and transform message content and addressing in an input message in order to generate a response message according to programmable tables of exceptions and rules, wherein the exceptions and rules conform to a syntax that permits matching of a single exception to multiple forms of input message constructions, wherein syntactic elements of the exception or rule may appear in a different order from the respective matching elements in the input message.

20 18. Telecommunications services apparatus for use with a telephone network, the apparatus comprising:

25 a message transformation means operable to return a response message back to the original sender without requiring a routing query to a home location register (HLR), the response addressing and routing information being derived from the original message.

19. Apparatus according to claim 15 or claim 18, wherein the routing query is an SRI-SM MAP message.

30 20. Apparatus according to claim 15, claim 18 or claim 19, wherein the routing information obtained from the original message is in the form of an international

mobile subscriber identifier (IMSI) and a visitor location register (VLR) address corresponding to the sender's location.

21. A telecommunications services method for a telephone network, the method  
5 comprising:

supporting execution of one or more messaging applications, wherein an application may be executed for each of any or all input messages;

storing message attributes matched to respective messaging applications;

10 comparing, for each message, an attribute of that message with the stored message attributes, and thereby selecting the respective messaging application on the basis of the comparison; and

executing the selected messaging application, execution of the selected application including processing, transforming and/or routing the respective message.

15 22. A method according to claim 21, wherein the message attributes include destination address.

23. A method according to claim 21 or claim 22, wherein the message attributes include destination address type.

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24. A method according to claim 21, claim 22 or claim 23, wherein the message attributes include originating address.

25. A method according to any one of claims 21 to 24, wherein the message  
25 attributes include originating address type.

26. A method according to any one of claims 21 to 25, wherein the message attributes include signalling fields.

30 27. A method according to any one of claims 21 to 26, wherein the message attributes include message content.

28. A method according to any one of claims 21 to 27, including routing messages via at least one SMS router for execution of one or more messaging applications.
29. A method according to claim 28, wherein service logic may operate in the SMS  
5 router in conjunction with centralised intelligence in an SMS service control point (SCP).
30. A method according to any one of claims 21 to 29, comprising a message transformation step for parsing, interpreting and transforming message content and  
10 addressing in order to generate a response message.
31. A method according to claim 30, wherein the response message is generated according to a programmable table of exceptions.
- 15 32. A method according to claim 30 or claim 31, as dependent on claim 28, wherein the response message is routed via the SMS router.
33. A method according to claim 30, claim 31 or claim 32, wherein the message from the sender is in mobile originated form, whereas the response message is in  
20 mobile terminated form.
34. A method according to claim 30 or claim 31, wherein the response message is routed over a data network.
- 25 35. A method according to any one of claims 30 to 34, wherein the message transformation step is operable to return a response message back to the original sender without requiring a routing query to a home location register (HLR), the response addressing and routing information being derived from the original message.
- 30 36. A telecommunications services method for a telephone network, the method comprising:

a message transformation step operable to parse, interpret and transform message content and addressing in order to generate a response message according to programmable tables of rules known as exceptions, wherein the exceptions conform to a syntax that permits matching of a single exception to multiple forms of message construction.

37. A telecommunications services method for a telephone network, the method comprising:

a message transformation step operable to parse, interpret and transform message content and addressing in an input message in order to generate a response message according to programmable tables of exceptions and rules, wherein the exceptions and rules conform to a syntax that permits matching of a single exception to multiple forms of input message constructions, wherein syntactic elements of the exception or rule may appear in a different order from the respective matching elements in the input message.

38. A telecommunications services method for a telephone network, the method comprising:

a message transformation step operable to return a response message back to the original sender without requiring a routing query to a home location register (HLR), the response addressing and routing information being derived from the original message.

39. A method according to claim 35 or claim 38, wherein the routing query is an SRI-SM MAP message.

40. A method according to claim 35, claim 38 or claim 39, wherein the routing information obtained from the original message is in the form of an international mobile subscriber identifier (IMSI) and a visitor location register (VLR) address corresponding to the sender's location.

41. A computer program for implementing a method according to any one of claims 21 to 40.

42. A storage medium storing a computer program according to claim 41.